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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,567	01/23/2001	Harold R. Blomquist	TRW(VSSIM)4820	2445

7590 08/09/2002

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EXAMINER
MILLER, EDWARD A

ART UNIT	PAPER NUMBER
3641	

DATE MAILED: 08/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/767,567	Applicant(s) BLOMQUIST, HAROLD R.	
	Examiner Edward A. Miller	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-14 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 23 January 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Claims 1-14 of this application appear directed to the same patentable invention as that of claims 1-19 of commonly assigned application S.N. 09/767,017. The issue of priority under 35 U.S.C. 102(g) and possibly 35 U.S.C. 102(f) of this single invention must be resolved.

Since the U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302), the assignee is required to state which entity is the prior inventor of the conflicting subject matter. A terminal disclaimer has no effect in this situation since the basis for refusing more than one patent is priority of invention under 35 U.S.C. 102(f) or (g) and not an extension of monopoly.

Failure to comply with this requirement will result in a holding of abandonment of this application.

In both applications, process claims and product by process claims are drawn to preparing a solution of ammonium nitrate (AN), phase stabilizer and an inert liquid, for example water, atomizing and freeze drying the solution, resulting in PSAN particles. Although claim 1 in the instant case recites disintegrating agglomerates, claim 8 in '017 also grinds the agglomerates to disintegrate the agglomerates that are inherently produced in the process. The instant application requires a (small amount of) surfactant, not claimed in '017. However, use of such is notoriously well known in the art of freeze-drying oxidizer salts and shown in the prior art cited below, and further the claims of both applications have a scope of "comprising", wherein various other ingredients, etc., are within the purview of the claims. This same patentable invention status is particularly the case for the product by process claims in each application, which are in essence drawn to small particles of PSAN. A product defined by the process by which it can be made is still a product claim (*In re Bridgeford*, 357 F.2d 679, 149 USPQ 55 (CCPA 1966)).

Thus, the claims clearly present the issue as framed above, e.g., who is the inventor, or the first inventor, of the invention, 102(f, g). Note *Moore v. McGrew*, 170 USPQ 149, where even mutually exclusive inventions may nonetheless be drawn to the same patentable invention. This is not such a distinct situation as in *Moore v McGrew*; as set forth above, there is clear, substantially complete overlap as to the two applications. This is not to preclude the possibility, for example, of a showing of patentable distinctness, or amendment of the claims to eliminate patentable overlap. Further, upon reconsideration, assignee might find that a mistake was made in the inventorship of one or both of the applications, and seek to correct such. As to this possibility, see also paragraph 7 below which could then apply. The Office does not institute interferences between different inventive entities having the same assignee under current practice.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1-5 and 7-10, the term "phase stabilizer" is indefinite, since it does not state what phase is being stabilized. The process includes a number of phases, including frozen solid, solution - liquid phase, etc. Indeed, the surfactant could be regarded as a liquid phase stabilizer, so this could also be double recitation of the same thing. Applicant should change this term in claim 1 to --an ammonium nitrate --"phase stabilizer," whereby this will be clear. Further, there are phase stabilizers for ammonium nitrate which are not soluble in aqueous (or possibly other inert liquid) solution. Thus, it is not clear whether this requires a loose definition of "solution," which includes suspended fine particles, or whether this is a improper indirect limitation on the stabilizer and other

ingredients, including the surfactant and other ingredients encompassed by the broad "comprising" scope. These are exemplary.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mehrotra et al., in view of Poole et al. '272, Burns et al. '329, Olt, Rogers et al., and further in view of Buhl et al. and Scheffee et al.

Mehrotra et al. teaches preparing a solution of AN and phase stabilizer in water, forming a precipitate therefrom and drying such, and then grinding to form powder form. Further, although the method primarily used is drying at moderate temperature, as at col. 3, lines 1-6, Mehrotra et al. at col. 4, lines 15 clearly suggests freeze drying instead. In view of Poole et al. '272 (for example at col. 5, lines 45-53) and Burns et al. '329 (for example at col. 7, lines 35-47) it would have been obvious to substitute potassium nitrate for the potassium fluoride phase stabilizing salt, and in the usual phase stabilizing amounts. However, details of the freeze drying process are not described in Mehrotra et al. Olt and Rogers et al. show the freeze drying process as applied to ammonium oxidizer salts, ammonium perchlorate, including the conventional use of surfactants and binders in solution and/or emulsion [emulsions include, comprise, an aqueous solution of inorganic oxidizer salt] prior to freeze drying to form the particulate oxidizer composition. The freeze drying process inherently results in free flowing, spherical precipitates or powders. Buhl et al. further teach about the freeze drying process in col. 5, lines 5-25, surfactants at various places including col. 6, lines 26-44, and

polyvinylpyrrolidone at col. 11, lines 53-56. Variation of these notoriously well known ingredients and steps in the prior art process of freeze drying to produce PSAN powder would have been obvious to one of ordinary skill in the art. It is well settled that optimizing a result effective variable is well within the expected ability of a person or ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

For instant claim 3, Scheffee et al. further teach gas generating pyrotechnic compositions which include oxidizer and binders which may include PVP at col. 2, lines 10-19. In view of the teachings of Olt and Rogers that binder ingredients may be included in the freeze drying process, substitution thereof in Olt and Rogers would have been obvious.

As to product by process claims 10 and 14, these are deemed obvious over the PSAN powder made in Mehrotra et al., Poole et al. '272, and Burns et al. '329. Where the product appears to be the same or only slightly different, the properties recited would appear to be inherent, regardless of the method of preparation. The Office does not have testing facilities to determine such. The burden falls on applicant to show that the prior art products do not necessarily or inherently possess the claimed properties. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966; *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596; *In re Best*, 562 F.2d 1252, 1255; 195 USPQ 430, 433-434; *In re Brown*, 459 F.2d 531, 173 USPQ 685.

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 09/767,017 in view of Olt, Rogers et al., and Buhl et al.. The commonly assigned copending application teaches the invention, except for the use of surfactant herein. However, use of a surfactant is notoriously well known in the art as set forth in Olt, Rogers et al., and Buhl et al., as set forth above. This presumes that the situation set forth in paragraph 1 above under 35 USC 102 (f, g) is overcome by amendment, including possibly of inventorship, argument or showing, sufficient to establish that the inventions are not the same patentable invention, but that they overlap.

This is a provisional obviousness-type double patenting rejection, as no claims have been allowed, nor is it clear that the inventions will overlap in the end, e.g., after amendment.

8. As to the instant application and that of Sampson et al., 09/767,017, applicant is reminded of the continuing duty of candor and disclosure, vis-a-vis the references cited and prosecution in each application as to the other.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning either this or an earlier communication from the Examiner should be directed to Examiner Edward A. Miller at (703) 306-4163. Examiner Miller may normally be reached Monday-Thursday, from 10 AM to 7 PM.

If attempts to reach Examiner Miller by telephone are unsuccessful, his supervisor Mr. Carone can be reached at (703) 306-4198. The Group fax number is (703) 305-7687.

If there is no answer, or for any inquiry of a general nature or relating to the application status, please call the Group receptionist at (703) 308-1113.

Miller/em
August 5, 2002

EDWARD A. MILLER
PRIMARY EXAMINER